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No 12

Remarks

On Cold

by

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of

Charleston South Carolina.

1807.

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The subject of cold used as a remedy in disease, has of late excited considerable attention in the medical world.

The question whether the effect of this noble remedy be caused by a stimulating or sedative power, from a tendency to establish principles on which its use should be regulated, has an equal claim to attention & interest.

To consider this question is the intention of the following piece. In doing this we shall mention a few of the principal arguments and facts used on either side, attempt to contrast them, and thence draw our conclusion.—

Previous however to immediately entering on the subject, it would not be improper to explain myself as to the nature of Cold. Cold is certainly a negative

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negative quality, and cannot therefore be said to commence at any fixed point. This is proven by the common experiment of making the same temperature appear hot or cold to the same body according to the different circumstances under which it had previously laboured. Thus suppose the mercury at 80° Fahrenheit and suddenly reduced to 60°. the sensation of cold would be ~~evident~~ felt. Again, suppose the mercury at 40° F suddenly elevated to 60°. the opposite sensation would be the effect.

We shall commence, first, with the effects of intense cold upon the human body. These are langour, indisposition to motion and so great a desire to sleep that even the fear of certain death cannot prevent indulging. In explaining these phenomena, the advocates for the stimulant doctrine suppose the action of cold similar

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similar to that of opium, brandy & other stimuli, which when used to excess induce the same symptoms. To this explanation we cannot readily assent when we consider the effects of cold water upon the system generally, & the pulse. From Dr. Currie's valuable publication on water, we quote the following illustrative fact. "If the affusion of cold water on the surface of the body be used during the cold stage of the paroxysm of fever, the respiration is nearly suspended; the pulse becomes fluttering, feeble, & of an incalculable frequency; the surface & extremities become doubly cold and shrivelled and the patient seems to struggle with the pangs of instant dissolution. I have no doubt from what I have observed, that in such circumstances, the repeated affusion of a few buckets of cold water would extinguish life." —

From the above striking fact I think it will appear

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evident, that the effects of cold instead of partaking of a stimulant nature, is as debilitating an agent as we can use. —

In order to prove more particularly its effects on the pulse the following experiment from Dr. Stock's treatise on cold will suffice: it was made upon "two Irish porters; both (he says) were strong muscular men, & both in the vigour of life, being little more than thirty years old. It was thought that they might without inconvenience bear immersion without muscular strength, for a longer period than had been submitted to in any of the instances above cited. The result was decisive and satisfactory. In the first, who appeared the strongest of the two, the pulse was reduced in four minutes 12 strokes; in ten minutes 14 strokes, and scarcely perceptible; in about three minutes more, the pulse was nearly obliterated; only twelve pulsations & those exceedingly faint could be made out in the space of half a minute." The other case was of the same nature & equally conclusive.

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It may be said however that in most of the experiments made with cold water, the pulse is considerably increased in frequency, may that in most of the experiments made by the Author just quoted, this was the result, but it ought also to be observed, that the pulse in these instances is very much diminished in force & fullness. This circumstance then I conceive tends rather to detract from than add to the stimulant doctrine.

Vienna. It has been common to notice the effects produced on those persons who inhabit very northern climates. We think this argument in favour of the cold water doctrine, and has been with satisfactory answered by the advocates of the opposite opinion than any other. The climate of the Lapanders is very bad, so much so that their corporeal and mental endowments inferior to the inhabitants of more temperate regions. The head of a Lapander may perhaps be compared when in perfect health

health, does not pulsate oftener than from thirty to forty times in a minute.

Thirdly. The increased depuration from the nose which an exposure to a cold atmosphere always occasions, is an bad, proves cold a stimulus; for in order (not intended) to work more frequently the nerves must take on a stronger action, this action can only be produced by a stimulus, which stimulus in this instance is evidently cold. That cold also causes a less increased secretion in urinary system, and that the phenomena are capable of a different solution we think evident. The cold in this instance according to our doctrine deoxidates less, not by actually not and of course; the excitability is very much accumulated; this excitability so accumulated is capable of being strongly acted upon by a very moderate stimulus. — that always tending to an equilibrium, which from the contiguous, is a sufficient stimulus under these circumstances

circumstances to excite the increased reflexion.

This would explain the many instances of increased action which the application of cold produces, for we grant that cold under certain circumstances and modes of application may be made to produce stimulating effects.

Fourthly. We will now notice some of the rules laid down for the application of cold to the diseased system. Brunonian writers on this subject, are earnest to warn us of the impropriety of using cold affusions during the cold fit of fevers, on account of the dangerous sinking of the pulse and consequent debility. Now if cold be a stimulus, why would not these affusions tend rather to brace the system as Bark & other tonics or stimuli would. On the contrary when used during the hot stage, when the internal action is great and the system in a highly excited state, cold affusions are of infinite service. Cases where experiments appear to have been made

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with great candour and correctness mentions a stubborn case of a patient in the cold stage. "In two stubborn cases" cold water was dashed over them as usual, but not with the usual happy effects; the breathing was for some minutes almost suspended; their pulse at the wrist was not to be felt; the pulsations of the heart were feeble and fluttering, a deadly coldness spread over the surface, and when the restoration was effected it was slow, uneasy and laborious" he proceeds and says "The same remedy was however used in the hot stage of the ensuing paroxysm and with the usual happy effects."

Our worthy professor of the institutes, in his account of Yellow Fever, tells us, "Cold water was a most agreeable & powerful remedy in this disease; I directed it to be applied by means of napkins to the head, and to be injected into the bowels by way of glyster". In another place he says "Cold water when applied to the feet as certainly reduces the

the pain in joints and frequently so warm water applied in the same way produces contrary effects in it.

Upon the whole we must conclude an allowance for the relative effect of cold, and more particularly so from its medical application, for in many cases of chronic rheumatism when the application of stimulus is used, indeed in, cold is extremely useful.

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